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OFFICIAL

15. (Amended) A satellite television system that provides television programming to passengers on an aircraft derived from at least one satellite, said system comprising:

a video and audio signal distribution system disposed on the aircraft, the video and audio signal distribution system being configured to distribute video and audio signals to the passengers on the aircraft;

a steerable antenna that is capable of being steered towards the at least one satellite in response to control signals supplied thereto;

an antenna controller that is coupled to the steerable antenna, the antenna controller being configured to provide the control signals to the steerable antenna, to steer the steerable antenna so that the steerable antenna is locked onto RF signals transmitted by the at least one satellite, and to downconvert the RF signals to provide downconverted RF signals that correspond to a plurality of programming channels; and

a receiver/decoder that is coupled to the antenna controller and to the video and audio signal distribution system, the receiver/decoder being configured to process the downconverted RF signals to provide video and audio signals corresponding to the plurality of programming channels, and to output the video and audio signals to the video and audio signal distribution system which distributes the plurality of programming channels in real time to the passengers.

19. (Amended) A satellite television system that provides television programming to passengers on an aircraft derived from at least one satellite, said system comprising:

a video and audio signal distribution system disposed on the aircraft, the video and audio signal distribution system being configured to distribute video and audio signals to the passengers on the aircraft;

a steerable antenna that is capable of being steered towards the at least one satellite in response to control signals supplied thereto;

an antenna controller that is coupled to the steerable antenna, the antenna controller being configured to provide the control signals to the steerable antenna, to steer the steerable antenna so that the steerable antenna is locked onto RF signals transmitted by the at least one satellite;

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a downconverter that is coupled to the antenna controller and that downconverts the RF signals to provide downconverted RF signals that correspond to a plurality of programming channels; and

a receiver/decoder that is coupled to the downconverter and to the video and audio signal distribution system, the receiver/decoder being configured to process the downconverted RF signals to provide video and audio signals corresponding to the plurality of programming channels, and to output the video and audio signals to the video and audio signal distribution system which distributes the plurality of programming channels in real time to the passengers.

20. (New) A system that provides video or audio to passengers on an aircraft, the video or audio being obtained from satellite-transmitted signals, the system comprising:

a steerable antenna that is capable of being steered towards the at least one satellite in response to control signals supplied thereto;

an antenna controller that is coupled to the steerable antenna, the antenna controller being configured to provide the control signals to the steerable antenna, to steer the steerable antenna so that the steerable antenna is locked onto RF signals transmitted by at least one satellite, and to downconvert the RF signals to provide downconverted RF signals that correspond to a plurality of video or audio channels; and

a receiver/decoder that is coupled to the antenna controller and which is configured to process the downconverted RF signals to provide video or audio signals corresponding to the plurality of video or audio channels, for distribution of the video or audio to the passengers.

21. (New) The system of claim 20, further comprising:

a video and audio signal distribution system disposed on the aircraft, the video and audio signal distribution system being configured to receive the plurality of video or audio channels output by the receiver/decoder and to distribute the video or audio to the passengers.

22. (New) The system of claim 20, wherein the control signals provided by the antenna controller are provided in response to inertial reference signals received by the antenna controller.

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23. (New) The system of claim 20, wherein the control signals provided by the antenna controller are provided in response to global positioning system (GPS) signals received by the antenna controller.

24. (New) The system of claim 20, wherein the control signals provided by the antenna controller are provided in response to status signals received by the antenna controller.

25. (New) The system of claim 20, further comprising:

an antenna interface unit communicatively coupled between the steerable antenna and the antenna controller,

wherein the status signals are output by the steerable antenna and are transferred to the antenna controller by way of the antenna interface unit.

26. (New) The system of claim 20, wherein the downconverter downconverts the RF signals to a range of 950 to 1450 MHz.

27. (New) The system of claim 20, wherein the downconverter receives the RF signals in a range of 12.2 to 12.7 GHz, and downconverts the RF signals to intermediate frequency (IF) signals in a range of 950 to 1450 MHz.

28. (New) The system of claim 20, further comprising:

an antenna interface unit communicatively coupling the steerable antenna to the antenna controller and to the receiver/decoder,

wherein status signals output by the steerable antenna are provided to the antenna controller by way of the antenna interface unit.

29. (New) The system of claim 20, wherein the steerable antenna is capable of being either electronically steered or mechanically steered.

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30. (New) The system of claim 29, wherein the steerable antenna is positioned to track the at least one satellite in both azimuth and elevation directions.

31. (New) The system of claim 29, further comprising at least one servo motor coupled to the steerable antenna, wherein the steerable antenna is positioned by the at least one servo motor to track the at least one satellite so as to receive signals output by the at least one satellite.

32. (New) The system of claim 20, wherein a portion of the process performed by the receiver/decoder to convert the downconverted RF signals into the video or audio signals includes MPEG decoding.

33. (New) The system of claim 20, wherein the video or audio signals output by the receiver/decoder are analog signals.

34. (New) A system that provides video or audio to passengers on an aircraft, the video or audio being obtained from satellite-transmitted signals, the system comprising:

a steerable antenna that is capable of being steered towards at least one satellite in response to control signals supplied thereto;

an antenna controller that is coupled to the steerable antenna, the antenna controller being configured to provide the control signals to the steerable antenna, to steer the steerable antenna so that the steerable antenna is locked onto RF signals transmitted by the at least one satellite;

a downconverter that is coupled to the antenna controller and that downconverts the RF signals to provide downconverted RF signals that correspond to a plurality of video or audio channels; and

a receiver/decoder that is coupled to the antenna controller and which is configured to process the downconverted RF signals to provide video or audio signals corresponding to the plurality of video or audio channels, for distribution of the video or audio to the passengers.

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35. (New) The system of claim 34, further comprising:  
a video and audio signal distribution system disposed on the aircraft, the video and audio signal distribution system being configured to receive the plurality of video or audio channels output by the receiver/decoder and to distribute the video or audio to the passengers.
36. (New) The system of claim 34, wherein the control signals provided by the antenna controller are provided in response to inertial reference signals received by the antenna controller.
37. (New) The system of claim 34, wherein the control signals provided by the antenna controller are provided in response to global positioning system (GPS) signals received by the antenna controller.
38. (New) The system of claim 34, wherein the control signals provided by the antenna controller are provided in response to status signals received by the antenna controller.
39. (New) The system of claim 34, further comprising:  
an antenna interface unit communicatively coupled between the steerable antenna and the antenna controller,  
wherein the status signals are output by the steerable antenna and are transferred to the antenna controller by way of the antenna interface unit.
40. (New) The system of claim 34, wherein the downconverter downconverts the RF signals to a specific frequency.
41. (New) The system of claim 34, wherein the downconverter receives the RF signals in a range of 12.2 to 12.7 GHz, and downconverts the RF signals to intermediate frequency (IF) signals in a range of 950 to 1450 MHz.

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42. (New) The system of claim 34, further comprising:

an antenna interface unit communicatively coupling the steerable antenna to the antenna controller and to the receiver/decoder,

wherein status signals output by the steerable antenna are provided to the antenna controller by way of the antenna interface unit.

43. (New) The system of claim 34, wherein the steerable antenna is capable of being either electronically steered or mechanically steered.

44. (New) The system of claim 43, wherein the steerable antenna is positioned to track the at least one satellite in both azimuth and elevation directions.

45. (New) The system of claim 43, further comprising at least one servo motor coupled to the steerable antenna, wherein the steerable antenna is positioned by the at least one servo motor to track the at least one satellite so as to receive signals output by the at least one satellite.